

Geochemistry Working Group

Geoscientists use physics, chemistry, biology, mathematics, etc. to **understand** how the Earth system works

Geosciences is the proto-typical multi-disciplinary science

Engineers use physics, chemistry, biology, mathematics, etc. to **manipulate and control** the Earth system

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The goal of geochemical research is to better understand fundamental processes associated with the chemical evolution of the Earth (and other planetary bodies).

DUSEL offers geochemists the opportunity to:

- design and control experimental parameters
- plan long-duration experiments
- have guaranteed access to the experimental site

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Flagship Experiment in Geochemistry

How do Mississippi Valley type Pb-Zn-Cu deposits form?

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How do Mississippi Valley type Pb-Zn-Cu deposits form?

Identify and characterize isolated rock mass (1-10 yr)

Establish a thermal environment (1-2 yr)

Introduce fluids (10-30 yr)

Monitor the system remotely and through sampling (C)

Mine back the rock volume (5-10 yr)

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geochemistry

geology

mining engineering

civil engineering

geological engineering

environmental engineering

bio-geosciences

hydrogeology

geophysics

technique development

E&O

etc.